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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/849,523 | 05/20/2004 | Yoshinori Uzuka | 1075.1263 | 5577 |
| 21171 | 7590 | 04/04/2006 | EXAMINER | |
| STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | NINO, ADOLFO | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2831 | |

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/849,523

Applicant(s)

UZUKA ET AL.

Examiner

Adolfo Nino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20 is/are allowed.
- 6) ☒ Claim(s) 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Huffman (US 4,480,289).

Regarding claim 21 (currently amended), Huffman discloses an apparatus comprising: an electronic component (4); a printed wiring board (2) from the electronic component to form a gap therebetween; and a spacer (12) selectively attached to the printed wiring board by an elastic deformation thereof to seal the gap, the spacer (12) comprising a single-piece elastic member.

Allowable Subject Matter

Claims 1-20 are allowed.

The following is an examiner's statement of reasons for allowance:

With respect to claims 1, 2, 4, 6, 8, 10-15 and 17-19, the cited prior art does not disclose, teach or suggest, alone or in combination, a spacer comprising a single-piece elastic member with no ends thereof, said elastic member being detachably attached to the printed wiring board in such a way as to enclose the electronic component to seal a gap between the electronic component and the printed wiring board.

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With respect to claims 3, 5, 7 and 9, the cited prior art does not disclose, teach or suggest, alone or in combination, a spacer comprising an elastic member with no ends thereof having a frame-like shape, and wherein the frame-like shape has a pair of hook portions for projecting into the gap between an electronic component and a printed wiring board, the hook portions being provided on the inner outline of the frame-like shape to oppose to each other.

With respect to claim 16, the cited prior art does not disclose, teach or suggest, alone or in combination, a printed circuit board, comprising: a spacer formed as an elastic member, and wherein the frame-like shape has a catch protrusion on its inner outline, which catch protrusion protrudes into the gap between an electronic component and the printed wiring board.

With respect to claim 20, the cited prior art does not disclose, teach or suggest, alone or in combination, an electronic equipment, comprising a printed circuit board which includes a spacer formed as an elastic member with no ends thereof having a frame-like shape, and wherein the frame-like shape has a catch protrusion on its inner outline, which catch protrusion protrudes into the gap between an electronic component and the printed wiring board.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments, see REMARKS section of Amendment, filed 1/5/06, with respect to currently amended independent claims 1, 13 and 17 have been fully considered and are persuasive. The rejection of claims 1, 2, 4, 6, 8, 10-15 and 17-19 has been withdrawn. The Examiner agrees with Applicant's argument that as currently amended independent claims 1, 13 and 17, Huffman does not recites the claimed spacer.

Huffman does not disclose a spacer comprising a single-piece elastic member with no ends thereof, said elastic member being detachably attached to the printed wiring board in such a way as to enclose the electronic component to seal a gap between the electronic component and the printed wiring board. The O-ring 12 of Huffman could be considered as the single-piece elastic member with no ends thereof, but it does not enclose the electronic component to seal a gap between the electronic component and the printed wiring board. Hence, amended independent claims 1, 13 and 17 overcome the rejection by Huffman.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adolfo Nino whose telephone number is (571) 272-1981. The examiner can normally be reached on M-F (7:30-5:00).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on (571) 272-2800 ext. 31. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AN


DEAN A. REICHARD
SUPERVISORY PATENT EXAMINER 3/31/06
TECHNOLOGY CENTER 2800